

DRAFT

Hazel Hill Lake

Ten-Year Area Management Plan

FY 2016-2025



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OVERVIEW

- **Official Area Name:** Hazel Hill Lake, #8321
- **Year of Initial Acquisition:** 1983
- **Acreage:** 502 acres
- **County:** Johnson
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Authority:** Wildlife
- **Statements of Purpose:**

A. Strategic Direction

Maintain existing habitat communities and develop additional wildlife habitat through active management. Manage forests, woodlands, grasslands, crop fields, and old fields to enhance a variety of natural communities. Maintain riparian zones and watersheds to assure water quality. Provide public recreational and educational opportunities compatible with the area's resources.

B. Desired Future Condition

The desired future condition of Hazel Hill Lake is high quality forest and woodland communities with interspersed open lands, i.e., native warm-season grass/forb communities, cropland and glades. Riparian zones and lake watersheds will be managed to provide optimal protection for the aquatic resources.

C. Federal Aid Statement

N/A

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- A. **Priority Areas:** None
- B. **Natural Areas:** None

II. Important Natural Features and Resources

- A. **Species of Concern:** Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
- B. **Caves:** None
- C. **Springs:** None

III. Existing Infrastructure

- 3 parking lots (1 Americans with Disabilities Act (ADA) accessible)
- 1 lake dam and spillway
- 1 concrete boat ramp

- 1 fishing dock (ADA accessible)
- 1 privy at fishing lake (ADA accessible)
- 1 fishing lake (Hazel Hill, 71 acres)
- 8 fishless ponds (1.5 acres)

IV. **Area Restrictions or Limitations**

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** Johnson County Water District #1
- D. Cultural Resource Findings:** Yes, records kept with Missouri Department of Conservation (Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Hazards and Hazardous Materials:** None
- F. Endangered Species:** None
- G. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. **Terrestrial Resource Management Considerations**

Challenges and Opportunities:

- 1) Open land habitat consists of crop fields, cool- and warm-season grass/forb plantings, and old fields. There are approximately 378 acres of open land habitat on this area. Interspersion within the wooded component and small field size provide ample edge for a variety of wildlife species. All open land units lie well within the watershed of the lake such that any management activity to set back succession must be conducted in a manner that does not result in increased soil erosion into the lake.
- 2) Old field and grassland habitats comprise approximately 323 acres of the area, offering management opportunity through the Agricultural Crop Permittee Program. Controlling invasive species is a continuing challenge.

Management Objective 1: Maintain healthy trees and woodlands with management emphasis on wildlife habitat and improved forest health and diversity.

Strategy 1: Manage the area to benefit species of conservation concern and woodland and forest communities. Management actions include, but are not limited to, conducting forest stand improvement, prescribed burns, snag retention and a multi-layered canopy with small gaps. Conduct management actions in accordance with the forest management plan developed based on the forest inventory. (Forestry)

Strategy 2: Monitor forests and woodlands for invasive vegetation, diseases and insects. Suppress any infestations that may develop by using mechanical and chemical control methods. (Wildlife)

Management Objective 2: Establish or maintain a forested corridor along all streams on the area.

Strategy 1: Maintain a forested corridor through natural regeneration or planting. A minimum 200 foot wide corridor should be maintained, where not limited by area boundary. (Forestry)

Strategy 2: When feasible, all management activities should follow the *Watershed and Stream Management Guidelines for Lands and Waters Managed by the Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Forestry)

Management Objective 3: Develop and maintain grasslands.

Strategy 1: Use best management practices to establish prairie reconstruction habitat on appropriate sites. (Wildlife)

Strategy 2: Convert existing fescue to wildlife-friendly cool-season grasses. (Wildlife)

Management Objective 4: Maintain old field habitat at early successional stage.

Strategy 1: Use best management practices to retard succession. (Wildlife)

Management Objective 5: Control invasive species. (Wildlife, Forestry, Fisheries)

Strategy 1: Monitor annually for invasive and exotic species. (Wildlife, Forestry, Fisheries)

Strategy 2: Use best management practices to control and/or eradicate invasive species. (Wildlife, Forestry, Fisheries)

Strategy 3: Reduce invasive and exotic species through management techniques including but not limited to chemical applications and mechanical thinning. (Wildlife, Forestry, Fisheries)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Hazel Hill Lake was purchased to construct a lake and provide fishing opportunities in Johnson County. The 71-acre Hazel Hill Lake was completed in 1988 and opened to fishing in May 1992. A drawdown structure is present in the 71-acre lake, providing additional fish and wildlife management options. There are nine other ponds on the area, ranging in size from 0.1 to 0.3 acres. All of these small ponds are not conducive to fisheries management due to insufficient depth, and excessive growth of aquatic vegetation. These smaller ponds are currently used as water holes for wildlife.

Management Objective 1: Maintain good water quality in the 71-acre lake.

Strategy 1: Manage the publically owned portion of the watershed of Hazel Hill Lake in a manner that minimizes adverse effects of nutrient and soil runoff to the lake through proper agricultural practices and buffers. (Fisheries and Wildlife)

Strategy 2: Monitor native aquatic vegetation in the lake and along the shoreline and maintain at levels conducive to good water quality. (Fisheries)

Strategy 3: Work with adjoining landowners to encourage land use practices that minimize nutrient and soil runoff to the watershed of Hazel Hill Lake. (Fisheries and Private Lands)

Management Objective 2: Maintain healthy aquatic habitat in area impoundments.

Strategy 1: Control invasive species, such as American lotus, so that diverse aquatic plant communities are allowed to exist. (Fisheries)

Strategy 2: Improve diversity of native aquatic plants by establishing beneficial plants in areas where they are lacking. (Fisheries)

Management Objective 3: Work with area personnel to manage selected small ponds as fishless ponds to benefit select wildlife species.

Strategy 1: Eradicate low-quality fish populations from some shallow ponds to benefit reptiles and amphibians. (Fisheries)

VI. Public Use Management Considerations

Challenges and Opportunities:

- 1) Hazel Hill Lake provides a variety of fishing, hunting and wildlife viewing opportunities year-round (i.e., including waterfowl, dove, deer, rabbit and quail hunting/viewing). The area receives adequate pressure from hunters and anglers

during every season. Fishing pressure is highest during the summer months, but is prevalent year-round.

- 2) Hazel Hill Lake attracts a high number of visitors. The area should be kept inviting to the public.
- 3) Hazel Hill Lake has many opportunities for outreach and education. The area offers easy bank fishing access from the main parking lot and floating fishing dock. This area has the potential to offer fishing clinics for young/inexperienced anglers.

Management Objective 1: Maintain healthy wildlife populations and habitat on the area to ensure hunting opportunities.

Strategy 1: Provide adequate food and cover for wildlife species to maintain a healthy sustainable population of wildlife on the area. (Wildlife)

Strategy 2: Provide dove hunting opportunities utilizing the Agricultural Crop Permittee System where appropriate. (Wildlife)

Strategy 3: Follow Best Management Practices for all terrestrial management activities. (Wildlife, Forestry, Fisheries)

Management Objective 2: Ensure infrastructure is maintained and kept clean and presentable to encourage public use and cooperation.

Strategy 1: Maintain all signs, roads, roadsides, fishing structures, parking lots, and privies in a well groomed and well maintained manner. (Wildlife)

Management Objective 3: Encourage the use of Hazel Hill Lake as a site for outreach and education classes/clinics.

Strategy 1: Host a variety of hunting and fishing clinics on the area to serve the community and encourage public involvement in outdoor activities. (All Divisions)

Management Objective 4: Maintain high-quality angling opportunities in the lake for area users.

Strategy 1: Monitor fish populations, as needed. (Fisheries)

Strategy 2: Adjust fishing regulations, as needed, to maintain fish populations at desirable levels. (Fisheries)

Strategy 3: Maintain area infrastructure, as appropriate, to allow easy and safe public access to the lake. (Fisheries)

Strategy 4: Control aquatic vegetation, as needed, to maintain public access to the fishery. (Fisheries)

VII. Administrative Considerations

Challenges and Opportunities:

- 1) Ensure all easements are properly documented and filed.
- 2) Evaluate land offered as additions to these areas.
- 3) Maintain existing infrastructure.
- 4) Annually assess the maintenance needs for the fishing docks, jetty, platforms, parking lot, dams and service roads.

Management Objective 1: Make sure all easements are properly filed.

Strategy 1: Use Geographic Information System to ensure that any easements are properly located (Wildlife).

Management Objective 2: Maintain infrastructure at current levels.

Strategy 1: Maintain infrastructure in accordance with Department Guidelines (Wildlife)

Management Objective 3: Facilitate a good working relationship with neighboring landowners.

Strategy 1: Promote habitat management on neighboring landowner properties. (Private Land Services)

Strategy 2: Work with neighbors to minimize any boundary, trespass, or other issues affecting Hazel Hill Lake CA or private property. (Wildlife)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered. (Wildlife)

APPENDICES

Area Background:

The Department purchased this 502-acre area in 1984. The 71-acre lake was constructed 1987-88. The lake was filled and stocked with fish in 1989. The area is composed of cropland, old fields, native grass plantings and timbered areas, which together create habitat, food and cover for upland and forest wildlife. The area provides disabled-accessible fishing, hunting/viewing of a variety of wildlife species, a boat ramp, parking and privies. Vegetation is managed using prescribed fire, mowing and permitted cropping.

Current Land and Water Types:

Land/Water Type	Acres	% of Area
Old Field	173	35
Grassland	150	30
Ponds/Lake	72	14
Crop	55	11
Forest	52	10
Total	502	100

References:

Missouri Department of Conservation. (1998). Missouri Natural Heritage Database.

Missouri Department of Conservation. (n.d.). *Area and resource management policies and procedures manual*. Jefferson City, Missouri: Missouri Department of Conservation.

Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, Missouri: Missouri Department of Conservation.

Missouri Department of Conservation. (2014). *Missouri watershed protection practice recommended practices for Missouri forests: 2014 management guidelines for maintaining forested watersheds to protect streams*. Jefferson City, Missouri: Conservation Commission of the State of Missouri.

Maps:

Figure 1: Area Map

Figure 2: Aerial Photo and Easements

Figure 3: Habitat Cover Map

Figure 1: Area Map

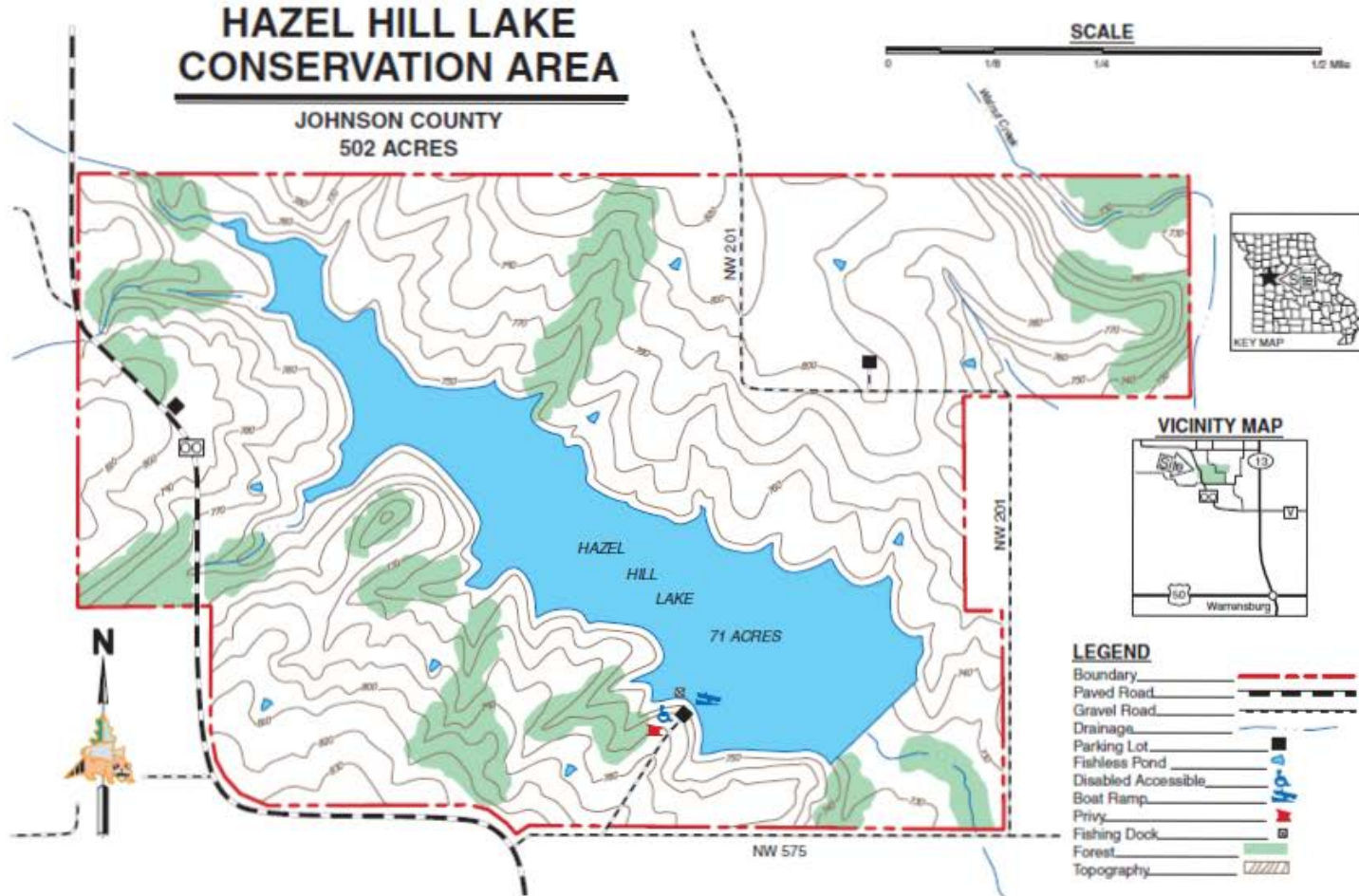


Figure 2: Aerial Photo and Easements

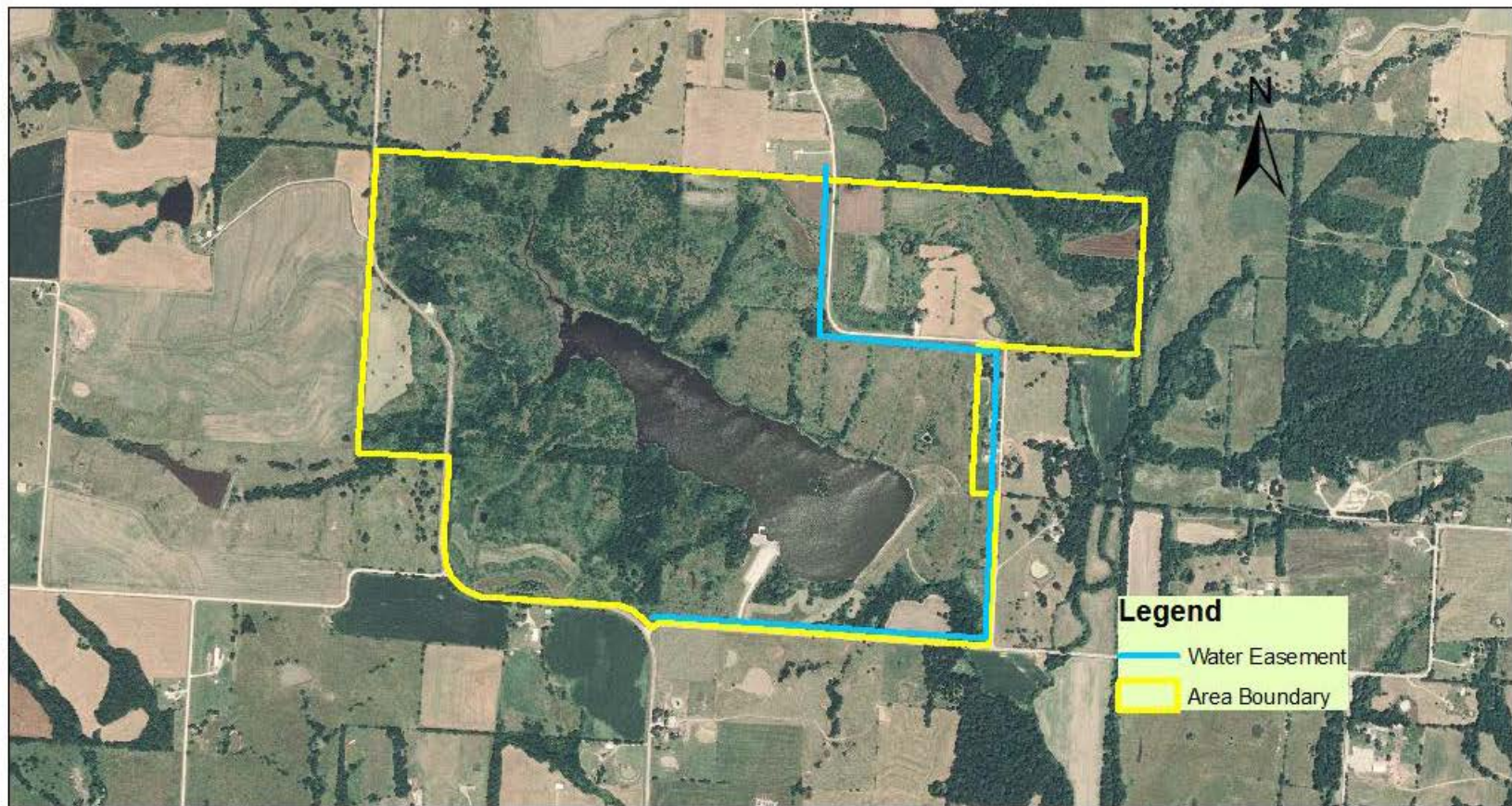
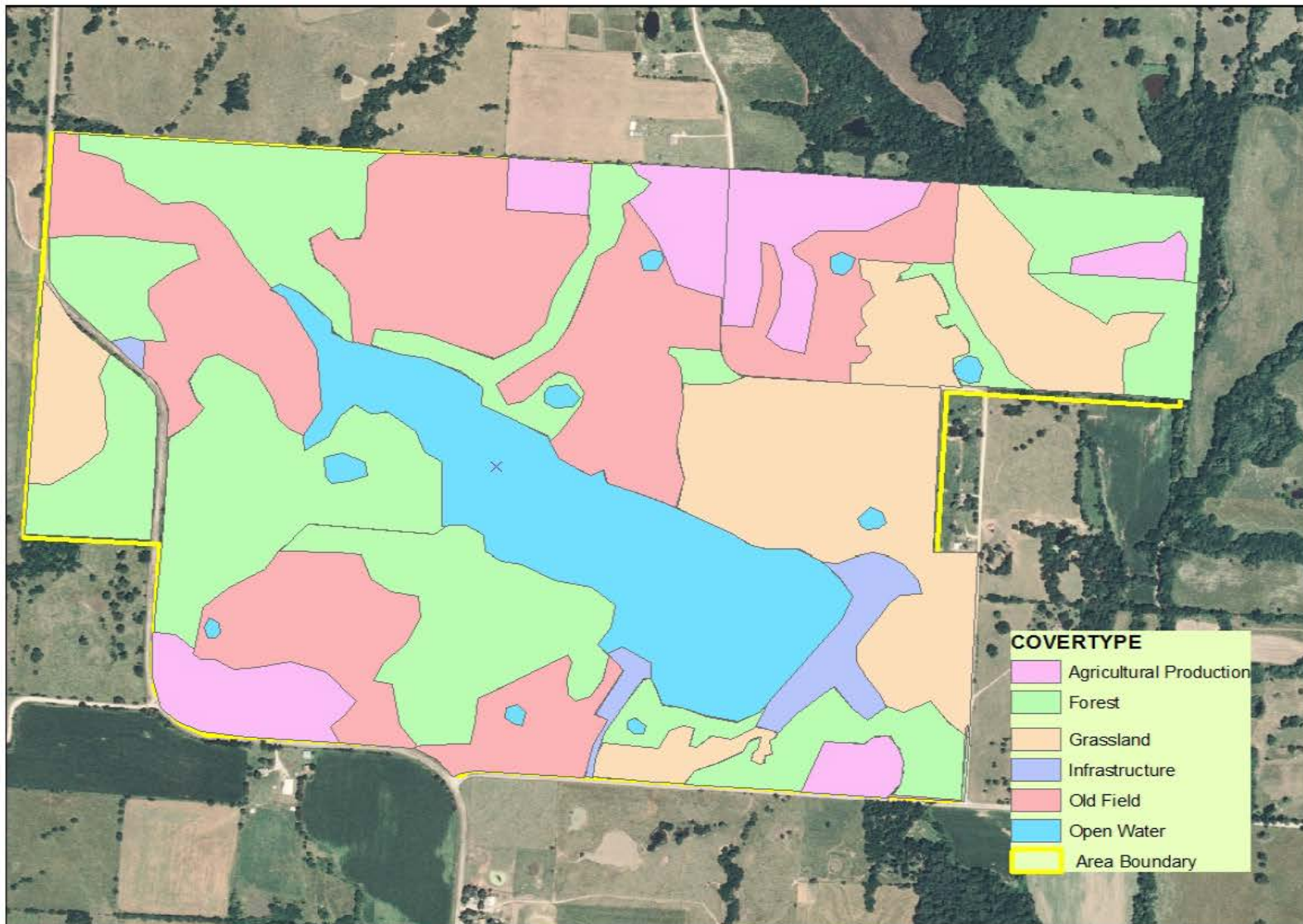


Figure 3: Habitat Cover Map



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